



UNITED STATES PATENT AND TRADEMARK OFFICE

cev
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,713	09/28/2001	Marc Petit-Huguenin	PX8S.265PA	6397

7590 03/21/2007
Crawford PLLC
Suite 390
1270 Northland Drive
St. Paul, MN 55120

EXAMINER

NG, CHRISTINE Y

ART UNIT	PAPER NUMBER
----------	--------------

2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/966,713	Applicant(s) PETIT-HUGUENIN ET AL.	
	Examiner Christine Ng	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16 and 17 is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,944,151 to Menard.

Referring to claim 1, Menard discloses in Figures 1 and 2 a broadband telephony system, comprising:

A plurality of remote endpoint devices (telephone to packet adapters 10a,400c) coupled to a broadband data network (packet network 30).

A plurality of remote PSTNs (connected to telephone line 14) coupled between the plurality of remote endpoint devices and a plurality of remote audio interfaces (telephone sets 42,62), each of the audio interfaces including a transducer (telephone sets must include microphones and speakers for producing sound; Column 2, lines 45-52) to communicate audible signals with a user (first user 32, second user 54), each

Art Unit: 2616

remote endpoint device being coupled to one remote PSTN (telephone line 14 connects to PSTN), each remote PSTN being coupled to more than one remote endpoint device (PSTNs connect to telephone to packet adapters 10a,400c), each remote PSTN being coupled to at least one remote audio interface (PSTN connected to a telephone set 42 or 62), and each remote audio interface being coupled to one remote PSTN (telephone set 42 or 62 connected to a PSTN). Refer to Column 3, lines 20-28; and Column 3, line 66 to Column 4, line 59.

An originating endpoint device (telephone to packet adapter 400c), including an audio processing circuit (D/A-A/D full duplex interface 18) adapted to receive uncoded analog signals corresponding to an audio signal (Column 3, lines 29-32), coupled between the broadband data network and a local audio interface (telephone set 62) adapted to communicate an audio signal, the originating endpoint device adapted to select a destination audio interface (telephone set 42) for delivery of the audio signal, the destination audio interface being one of the plurality of remote audio interfaces. Using telephone set 62, second user 54 calls first user 32 through telephone to packet adapter 400c. Refer to Column 5, lines 1-4.

A database arrangement (in an Internet server; Column 6, lines 32-36) adapted to determine a preferred path for the audio signal from the originating endpoint device to the destination audio interface by correlating each remote audio interface with one of the plurality of remote PSTNS (Figure 3, steps 106,108,116), and correlating each of the plurality of remote endpoint devices with one of the plurality of remote PSTNS (Figure 3, steps 106,108,116), the database arrangement being separately situated

Art Unit: 2616

from the originating endpoint device (in an Internet server). If the dialed number cannot be routed over the packet network 30, the telephone to packet adapter 400c routes the telephone set 62 to the telephone line and dials the telephone number. Therefore, each telephone set and telephone to packet adapter is correlated with a PSTN. Refer to Column 5, lines 5-27.

Referring to claim 2, Menard discloses in Figures 1 and 2 that the preferred path includes a destination endpoint device (telephone to packet adapter 10a) wherein the destination endpoint device is one of the plurality of remote endpoint devices being correlated to a destination PSTN (all telephone to packet adapters are indirectly connected to each PSTN), the destination PSTN being one of the plurality of remote PSTNs being uniquely correlated to the destination audio interface (each PSTN is connected to a telephone set). Refer to Column 3, line 66 to Column 4, line 59. Furthermore, Menard discloses that each of the audio interfaces communicate uncoded analog signals directly with a user (Column 2, lines 45-52), and that the audio processing circuit (D/A-A/D full duplex interface 18) of the originating endpoint device is adapted to communicate with the broadband data network (packet network 30) independent of any of the PSTNs. The D/A-A/D full duplex interface 18 of the telephone to packet adapters is directly connected to the packet network interface 26 and the telephone line interface 24 on separate connections. Refer to Column 3, lines 20-38.

Referring to claim 3, Menard discloses that the path is a cost-preferred path. As shown in Figure 5, long distance calls are routed over the packet network 30 instead of

Art Unit: 2616

over the PSTN, in order to reduce long distances costs of users. Refer to Column 6, lines 11-46; and Column 7, lines 22-38.

Referring to claim 4, Menard discloses in Figure 2 that the path includes a pre-defined path portion. The call must be sent from the telephone set 62 to the telephone to packet adapter 400c in order for the telephone to packet adapter 400c to determine the path. The path from the telephone set 62 to the telephone to packet adapter 400c is predetermined. Refer to Column 5, lines 1-4.

Referring to claim 5, Menard discloses in Figures 1 and 2 a local PSTN (connected to telephone line 14) coupled between the originating endpoint device (telephone to packet adapter 400c) and the local audio interface (telephone set 62), wherein the local audio interface is adapted to designate an identifier (phone number) associated with a destination audio interface (telephone set 42) and communicate the identifier to the originating endpoint device through the local PSTN, and the originating endpoint device is adapted to select the destination audio interface responsive to the identifier designated by the local audio interface. Using telephone set 62, second user 54 calls first user 32 through telephone to packet adapter 400c. If the dialed number cannot be routed over the packet network 30, the telephone to packet adapter 400c routes the telephone set 62 to the telephone line and dials the telephone number. Refer to Column 5, lines 1-27.

Referring to claim 6, Menard discloses in Figure 2 that the destination audio interface (telephone set 42) is coupled to the destination endpoint device (telephone to packet adapter 10a).

Art Unit: 2616

Referring to claim 7, Menard discloses in Figures 1 and 2 for use in an environment including a plurality of packet-based telephony endpoint devices (telephone to packet adapters 10a,400c), a packet-based telephony system (packet network 30) for establishing audio communications between two parties (first user 32, second user 54) via the plurality of packet-based telephony endpoint devices, a plurality of PSTN communication devices (telephone sets 42,62) and a plurality of PSTNs (connected to telephone line 14); the system comprising:

A first endpoint device (telephone to packet adapter 10a) and a second endpoint device (telephone to packet adapter 400c) each having:

A packet-based interface (packet network interface 26) for establishing packet-based communications between the first and second endpoint devices. Refer to Column 3, lines 20-38.

An audio arrangement (D/A-A/D full duplex interface 18) capable of producing and receiving sound for communications. Refer to Column 2, lines 45-52; and Column 3, lines 20-38.

The second endpoint device (telephone to packet adapters 400c) having a PSTN interface (telephone line interface 24) for establishing a connection between the second endpoint device and a remote PSTN communication device (telephone set 62), the remote PSTN communication device having an audio arrangement (telephone sets must include microphones and speakers for producing sound; Column 2, lines 45-52) capable of producing and receiving sound for communications. Refer to Column 2, lines 45-52; Column 3, lines 20-38; and Column 5, lines 1-4.

The first endpoint device and the second endpoint device effecting communications between two parties by using:

The packet-based interfaces of the first endpoint device and the second endpoint device to establish packet-based communications therebetween. Refer to Column 5, lines 12-26 and lines 36-57; and Column 8, lines 58-65.

The PSTN interface of the second endpoint device to establish audio communications between the first endpoint device and the remote PSTN communication device using the audio arrangement of the remote PSTN communication device and the first endpoint device and in response to receiving a PSTN identifier (phone number) corresponding to the remote PSTN communication device. Using telephone set 62, second user 54 calls first user 32 through telephone to packet adapter 400c. If the dialed number cannot be routed over the packet network 30, the telephone to packet adapter 400c routes the telephone set 62 to the telephone line and dials the telephone number. Refer to Column 5, lines 1-27.

Referring to claim 8, Menard discloses in Figures 1 and 2 that the database arrangement (in an Internet server; Column 6, lines 32-36) is adapted to determine a preferred path for the audio communications from the first endpoint device to the remote PSTN communication device, the database arrangement being separated situated from the first endpoint device (in an Internet server) and adapted to uniquely correlate each remote PSTN communication device with one of the plurality of packet-based telephony endpoint devices, and the preferred path includes a destination endpoint device wherein the destination endpoint device is one of the plurality of packet-based telephony

Art Unit: 2616

endpoint devices being correlated to the PSTN communication device. Refer to the rejection of claim 1 and claim 2.

Referring to claim 9, refer to the rejection of claim 3.

Referring to claim 10, refer to the rejection of claim 2 and claim 4.

Referring to claim 11, refer to the rejection of claim 5.

Referring to claim 12, Menard discloses in Figures 1 and 2 a method of sharing resources of a broadband telephony system using an originating endpoint device (telephone to packet adapter 400c) coupled between a broadband data network (packet network 30) and a local audio interface (telephone set 62) adapted to communicate an audio signal, the originating endpoint device adapted to select a destination audio interface (telephone set 42) for delivery of the audio signal, the destination audio interface being one of a plurality of remote audio interfaces (telephone sets 42,62).

Refer to Column 5, lines 1-27. The method comprises:

Registering with a registrar database arrangement (in Internet server; Column 6, lines 32-36) information from a plurality of user-provided gateways (first service provider 34, second service provider 44, cable company 52), each gateway coupled to a broadband data network (packet network 30) and one of a plurality of regional telephone networks (PSTNs connected to telephone lines 14), and each of the plurality of regional telephone networks coupled to more than one gateway (each PSTN is indirectly coupled to all gateways through packet network 30). Refer to Column 3, line 66 to Column 4, line 59.

Storing in the registrar database arrangement correlation information associating each of a plurality of audio interfaces and each gateway with one of the plurality of regional telephone networks. The database includes a list of telephone numbers that may be accessed via the packet network 30 (and the corresponding first service provider 34, second service provider 44, or cable company 52). If the dialed number may not be accessed via the packet network, it is routed through a corresponding PTSN. Also, if the dialed number is a long distance number, the database searches for a service provider in the area of the dialed telephone number. Refer to Column 5, lines 1-27; and Column 6, lines 11-46.

Exchanging with a plurality of other users, use of one user-provided gateway (cable company 52) as a remote network-terminating gateway for access to the registrar database and use of other user-provided gateways (first service provider 34) as remote terminating gateways. The database can be located in an Internet server (Column 6, lines 32-36) such as server 50 in cable company 52. The first service provider 34 is the destination gateway since it is attached to the destination telephone set 42.

At the originating endpoint device, communicating audible signals with a user (first user 32) and communicating representative audio signals with the broadband data network independent of any of the regional telephone networks. The D/A-A/D full duplex interface 18 of the telephone to packet adapters communicate with telephone sets and is directly connected to the packet network interface 26 and the telephone line interface 24 on separate connections. Refer to Column 3, lines 20-38.

Art Unit: 2616

Referring to claim 13, Menard discloses in Figures 1 and 2 that the method further comprises:

Selecting a destination audio interface (telephone set 42).

Routing a request from an originating gateway (cable company 52) to the registrar database (in Internet server) for access to the destination audio interface. Telephone to packet adapter 400c checks to see if a dialed call is to be routed though the PSTN or packet network 30. Refer to Column 5, lines 1-27.

Determining a preferred network path from the originating gateway to the destination audio interface, the preferred network path including a destination gateway (first service provider 34), the destination gateway being one of the plurality of user-provided gateways associated with the regional telephone network (PSTN connected to telephone line 14) associated with the destination audio interface. Each PSTN is indirectly associated with first service provider 34, second service provider 44, and cable company 52 through packet network 30. Refer to Column 5, lines 1-27.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,944,151 to Menard in view of U.S. Patent No. 6,477,164 to Vargo et al.

Referring to claim 14, Menard does not disclose that the method further comprises restricting use to the plurality of other users, of a user's gateway as a remote network-terminating gateway to a pre-determined maximum elapsed time within a periodic interval.

Vargo et al disclose restricting use to the plurality of other users, of a user's gateway as a remote network-terminating gateway to a pre-determined maximum elapsed time within a periodic interval. Vargo et al disclose in Figure 1 that at the originating gateway 114, a number of gateway subpackets are concatenated together to form a gateway voice packet 142. The gateway voice packet 142 is then sent to the originating transmux 124. The gateway subpackets may be sent to the originating transmux 124 after a predetermined period of time has elapsed, regardless of how many gateway subpackets have been concatenated. The originating transmux 124 then sends the packets across Internet network 124 to transmux 126 and then to destination gateway 116. Refer to Column 5, lines 5-21 and Column 6, lines 24-34. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include that the method further comprises restricting use to the plurality of other users, of a user's gateway as a remote network-terminating gateway to a pre-determined maximum elapsed time within a periodic interval. One would have been motivated to do so so that one particular user does not use a gateway for long periods of time, thereby facilitating fair access to the gateway.

Referring to claim 15, Menard does not disclose that the method further comprises restricting use to the plurality of other users, of a user's gateway as a remote

Art Unit: 2616

network-terminating gateway to a pre-determined maximum number of calls.

Vargo et al disclose restricting use to the plurality of other users, of a user's gateway as a remote network-terminating gateway to a pre-determined maximum number of calls. Vargo et al disclose in Figure 1 that at the originating gateway 114, a number of gateway subpackets are concatenated together to form a gateway voice packet 142. The gateway voice packet 142 is then sent to the originating transmux 124. The transmux subpackets may be sent to the destination transmux 126 after a predetermined number of transmux subpackets are linked together. The destination transmux 126 then sends the packets to destination gateway 116. Refer to Column 5, lines 5-21 and Column 6, lines 24-34. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include that the method further comprises restricting use to the plurality of other users, of a user's gateway as a remote network-terminating gateway to a pre-determined maximum number of calls.. One would have been motivated to do so so that one particular user does not use the gateway continuously for several calls, thereby facilitating fair access to the gateway.

Allowable Subject Matter

6. Claims 16 and 17 are allowed.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Ng whose telephone number is (571) 272-3124. The examiner can normally be reached on M-F; 8:00 am - 5:00 pm.

Art Unit: 2616

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

C. Ng *CN*
March 15, 2007



HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600